## **Supplementary material:**

Taprogge et al: Normal organ dosimetry for thyroid cancer patients treated with radioiodine as part of the multi-centre multi-national MEDIRAD project

### Supplementary Table 1: Ethics approval WP3

Investigating centre	Ethical		National, EudraCT
	approval	Ethics approval details	or ClinicalTrials.gov
	obtained		Identifier
UKW	9 <sup>th</sup> May	Approved by the National	EudraCT: 2019-
	2019	Ethics Committee	002244-25
UMR	14 <sup>th</sup> May	Approved by the National	EudraCT: 2019-
	2019	Ethics Committee	002244-25
IUCT-O	16 <sup>th</sup> Dec	Approved by the National	ID RCB: 2019-
	2019	Ethics Committee	A01734-53
RMH/ICR	19 <sup>th</sup> March 2020	The study was approved by the East Midlands - Nottingham 1 Research Ethics Committee (20/EM/0022) and the institutional review board at the Royal Marsden Hospital	ClinicalTrials.gov: NCT04391244

#### Supplementary Table 2: Acquisition parameters used for <sup>131</sup>I imaging as part of the MEDIRAD WP3 study.

#### <sup>131</sup>I acquisition protocol High Energy Collimator Photopeak energy window 364 keV ± 10% or ± 15% 128 x 128 SPECT(/CT) Matrix Body contour SPECT movement 2 x 30 (6° projection) or 2 x 36 (5° projection) **Projections** Adjusted based on measured count-rate for Time per projection patient acquisition Standard low-dose protocol (if applicable) CT

Supplementary Table 3: SPECT (/CT) reconstruction parameters used for  $^{131}$ I imaging as part of the MEDIRAD WP3 study.

# <sup>131</sup>I reconstruction protocol

Reconstruction	OSEM (4 iterations, 10 subsets)	
Attenuation correction (AC)	CTAC (One centre: Chang with 0.11 cm <sup>-1</sup> @ 364 keV)	
Scatter correction	Triple-Energy Window (TEW)	
Post-reconstruction filtering	None	